



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,782	05/13/2002	Yin-Chun Huang	8963-US-PA	6245
43831	7590	10/05/2006	EXAMINER	
BERKELEY LAW & TECHNOLOGY GROUP			GIBBS, HEATHER D	
1700NW 167TH PLACE			ART UNIT	
SUITE 240			PAPER NUMBER	
BEAVERTON, OR 97006			2625	

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 07/26/2006 has been entered and made of record.

Claims 1-24 are pending.

Response to Arguments

2. Applicant's arguments filed have been fully considered but they are not persuasive. Applicant argues, "Examiner has failed to establish that Figs 2A-3B are relevant in any way to "a light transparent slot" as claimed". Upon further review, the Examiner would like to point Applicant's attention to Fig 7A which is a more detailed view of a light transparent slot.

DETAILED ACTION

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,5-8,10,14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al (US 6,891,328) of Applicant's admitted prior art (APA).
5. Claim 1, which is representative of claim 10, Nakamura discloses a case comprising a light transparent slot comprising a substantially bar form shape, wherein

Art Unit: 2625

two or more widths corresponding to two or more points along a longitudinal direction of the light transparent slot are not all the same (Figs 2A-3B, 7A).

Nakamura does not disclose expressly a light source capable of illuminating a document, and generating an image generated at the place where the document is illuminated by the light source; at least one reflector capable of reflecting the image projected through the light transparent slot; a lens assembly capable of refracting the image from said at least one reflector; and an optical sensor capable of receiving the image from said the lens assembly.

APA discloses a light source 120 illuminating the document, and an image generated at the place where the document is illuminated by the light source; at least one reflector 130 on which the image can be projected through the light transparent slot; a lens assembly 140 on which the image projected by the reflector's reflecting the image; and an optical sensor 150 on which the image can be projected after the image passes through the lens assembly (Figs 1-2).

Nakamura & APA are combinable because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Nakamura with APA.

The suggestion/motivation for doing so would have been to enhance the quality of the optical sensor and decrease the noise, as taught by APA.

Therefore, it would have been obvious to combine APA with Nakamura to obtain the invention as specified in claim 1.

Art Unit: 2625

Regarding claim 5, which is representative of claim 14, Nakamura teaches wherein the light transparent slot is substantially shaped like dual trumpets (Figs 2A-3B).

For claim 6, which is representative of claim 15, Nakamura discloses wherein the optical sensor comprises a charge-coupled device (15:11-16).

Regarding claim 7, which is representative of claim 16, it is inherent that the optical sensor can be a CMOS image sensor since the optical sensor is also adapted for a CCD.

Considering claim 8, Nakamura teaches wherein the light source comprises a fluorescent lamp (15:17-28).

6. Claims 2,11, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura '328 in view of APA and further in view of Onda et al (US 6,404,515).

Nakamura discloses a scanning chassis.

Nakamura does not disclose expressly wherein the width corresponding to points at two sides of the light transparent slot are larger than the width corresponding to a point at a middle region of the light transparent slot.

Onda discloses wherein the width corresponding to points at two sides of the light transparent slot are larger than the width corresponding to a point at a middle region of the light transparent slot. (Figs 4,5 Ref 57).

Nakamura & Onda are combinable because they are from the same field of endeavor, image-reading apparatus.

Art Unit: 2625

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Onda with Nakamura.

The suggestion/motivation for doing so would have been to enable even quality of light, as taught by Onda.

Therefore, it would have been obvious to combine Onda with Nakamura to obtain the invention as specified in claims 2 and 11.

7. Claims 19,22, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura '328 in view of Onda et al (US 6,404,515).

Nakamura discloses a scanning chassis.

Nakamura does not disclose expressly wherein the width corresponding to points at two sides of the light transparent slot are larger than the width corresponding to a point at a middle region of the light transparent slot.

Onda discloses wherein the width corresponding to points at two sides of the light transparent slot are larger than the width corresponding to a point at a middle region of the light transparent slot. (Figs 4,5 Ref 57).

Nakamura & Onda are combinable because they are from the same field of endeavor, image-reading apparatus.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Onda with Nakamura.

The suggestion/motivation for doing so would have been to enable even quality of light, as taught by Onda.

Therefore, it would have been obvious to combine Onda with Nakamura to obtain the invention as specified in claims 19,22.

6. Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al (US 6,891,328) in view of Gubela (US 3,973,342).

Nakamura discloses the scanning chassis as disclosed above.

Nakamura does not disclose expressly wherein the case comprises an injection-molded case comprising an injection molded light transparent slot.

Gubela discloses a scanning chassis wherein the light transparent slot is formed while the case is fabricated by injection molding (3:36-57).

Nakamura & Gubela are combinable because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Gubela with Nakamura.

The suggestion/motivation for doing so would have been to provide an impact resistant plastic, as taught by Nakamura.

Therefore, it would have been obvious to combine Gubela with Nakamura to obtain the invention as specified in claim 9.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2625

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 17-18,20-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura (US 6,891,328).

Regarding claim 17, which is representative of claim 20, Nakamura teaches an apparatus comprising: means for illuminating a document 5 to generate an image; and means for passing the image through a light transparent slot, wherein the light transparent slot has a non-uniform width (Fig 7A).

For claim 18, Nakamura discloses wherein the light transparent slot comprises a substantially bar form shape, wherein two or more width corresponding to two or more points along a longitudinal direction of the light transparent slot are not all the same (Figs 2A-3B).

Allowable Subject Matter

7. Claims 12-13,23-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: Examiner found no prior art cited in its entirety, nor found any reason to combine said prior art which teaches wherein the widths corresponding to points at two sides are determined at least by a width of a light cone of the image and an allowable error of one or more reflected angles of said at least one reflector.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather D. Gibbs whose telephone number is 571-272-7404. The examiner can normally be reached on M-Thu 8AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Heather D Gibbs
Examiner
Art Unit 2625

hdg



THOMAS D.
~~LEE~~ LEE
PRIMARY EXAMINER